



0590  
07/8

## **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/067,122A  
Source: 01PE  
Date Processed by STIC: 7/19/02

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
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**Does Not Comply**  
**Corrected Diskette Needed**

OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/067,122A

DATE: 07/19/2002  
TIME: 14:11:12

*See p. 6 for  
Explanation of errors*

Input Set : A:\iu-0008.ST25.txt  
Output Set: N:\CRF3\07192002\J067122A.raw

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3 <110> APPLICANT: Kwon, Byoung S
5 <120> TITLE OF INVENTION: Antibody for 4-1BB
7 <130> FILE REFERENCE: 740.009US2 (IU-0008)
9 <140> CURRENT APPLICATION NUMBER: US 10/067,122A
10 <141> CURRENT FILING DATE: 2002-02-04
12 <150> PRIOR APPLICATION NUMBER: US 08/012,269
13 <151> PRIOR FILING DATE: 1993-02-01
15 <150> PRIOR APPLICATION NUMBER: US 07/922,996
16 <151> PRIOR FILING DATE: 1992-07-30
18 <150> PRIOR APPLICATION NUMBER: US 07/267,577
19 <151> PRIOR FILING DATE: 1988-11-07
21 <160> NUMBER OF SEQ ID NOS: 13
23 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 2350
27 <212> TYPE: DNA
28 <213> ORGANISM: Mus musculus
30 <220> FEATURE:
31 <221> NAME/KEY: misc_feature
32 <222> LOCATION: (1253)..(1255)
33 <223> OTHER INFORMATION: n=a, c, g, or t
36 <400> SEQUENCE: 1
37 atgtccatga actgctgagt ggataaacag cacgggatat ctctgtctaa aggaatatta      60
39 ctacaccagg aaaaggacac attcgacaac aggaaaggag cctgtcacag aaaaccacag      120
41 tgtcctgtgc atgtgacatt tcgccatggg aaacaactgt tacaacgtgg tggtcattgt      180
43 gctgctgcta gtgggctgtg agaagggtgg agccgtgcag aactcctgtg ataactgtca      240
45 gcctgggtact ttctgcagaa aatacaatcc agtctgcaag agctgccctc caagtacctt      300
47 ctccagcata ggtggacagc cgaactgtaa catctgcaga gtgtgtgcag gctattttcag      360
49 gttcaagaag ttttgctcct ctaccacaaa cgcggagtgt gagtgcattg aaggattcca      420
51 ttgcttgggg ccacagtgc aagatgtga aaaggactgc aggcctggcc aggagctaac      480
53 gaagcagggt tgcaaaacct gtagcttggg aacatttaac gaccagaacg gtactggcgt      540
55 ctgtcgaccc tggacgaact gctctctaga cggaagggtc gtgcttaaga cggggaccac      600
57 ggagaaggac gtggtgtgtg gacccctgtt ggtgagcttc tctcccagta ccaccatttc      660
59 tgtgactcca gagggaggac caggagggca ctccctgcag gtccttacct tgttccctggc      720
61 gctgacatcg gctttgctgc tggccctgat ctccattact ctccgtttct ctgtgctcaa      780
63 atggatcagg aaaaaattcc cccacatatt caagcaacca tttaagaaga ccactggagc      840
65 agctcaagag gaagatgctt gtagctgccg atgtccacag gaagaagaag gaggaggagg      900
67 aggctatgag ctgtgatgta ctatcctagg agatgtgtgg gccgaaaccg agaagcacta      960
69 ggaccccacc atcctgtgga acagcacaag caaccccacc accctgttct tacacatcat      1020
71 cctagatgat gtgtgggcgc gcacctcatc caagtctctt ctaacgctaa catatttgct      1080
73 tttacctttt ttaaattctt ttttaaattt aaattttatg tgtgtgagtg ttttgctgc      1140
75 ctgtatgcac acgtgtgtgt gtgtgtgtgt gtgacactcc tgatgcctga ggaggtcaga      1200
W--> 77 agagaaaggg ttggttccat aagaactgga gttatggatg gctgtgagcc ggnnngatag      1260

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79 gtcgggacgg agacctgtct tcttatttta acgtgactgt ataataaaaa aaaaatgata 1320
81 ttctcggaat tgtagagatt ctctgacac ccttctagtt aatgatctaa gaggaattgt 1380
83 tgatacgtag tatactgtat atgtgtatgt atatgtatat gtatatataa gactctttta 1440
85 ctgtcaaagt caacctagag tgtctgggta ccagggtcaat tttattggac attttacgtc 1500
87 acacacacac acacacacac acacacacgt ttatactacg tactgttatac ggtattctac 1560
89 gtcataataat gggatagggg aaaaggaaaac caaagagtga gtgatattat tgtggagggtg 1620
91 acagactacc ccttctgggt acgtagggac agacctcctt cggactgtct aaaactcccc 1680
93 ttagaagtct cgtcaagttc ccggacgaag aggacagagg agacacagtc cgaaaagtta 1740
95 tttttccggc aaatcctttc cctgtttcgt gacactccac cccttgtgga cacttgagt 1800
97 tcacctctgc gccggaaggt cagggtgtac ccgtctgtag gggcggggag acagagccgc 1860
99 gggggagcta cgagaatcga ctacacagggc gcccggggct tcgcaaatga aactttttta 1920
101 atctcacaag ttctgtccgg gctcggcgga cctatggcgt cgatccttat taccttatcc 1980
103 tggcgccaag ataaaacaac caaaagcctt gactcgggta ctaattctcc ctgccggccc 2040
105 ccgtaagcat aacgcggcga tctccacttt aagaacctgg ccgcgttctg cctggtctcg 2100
107 ctttcgtaaa cgtttcttac aaaagtaatt agttcttgc ttcagcctcc aagcttctgc 2160
109 tagtctatgg cagcatcaag gctgggtat tttgctacggc accgctacgc cgccgcaata 2220
111 aggggtactgg gcggcccgtc gaaggccctt tggtttcaga aaccaaggc cccctcata 2280
113 ccaacgtttc gactttgatt cttgccggta cgtggtggtg ggtgccttag ctctttctcg 2340
115 atagttagac 2350
118 <210> SEQ ID NO: 2
119 <211> LENGTH: 256
120 <212> TYPE: PRT
121 <213> ORGANISM: Mus musculus
123 <400> SEQUENCE: 2
125 Met Gly Asn Asn Cys Tyr Asn Val Val Val Ile Val Leu Leu Leu Val
126 1 5 10 15
129 Gly Cys Glu Lys Val Gly Ala Val Gln Asn Ser Cys Asp Asn Cys Gln
130 20 25 30
133 Pro Gly Thr Phe Cys Arg Lys Tyr Asn Pro Val Cys Lys Ser Cys Pro
134 35 40 45
137 Pro Ser Thr Phe Ser Ser Ile Gly Gly Gln Pro Asn Cys Asn Ile Cys
138 50 55 60
141 Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser Thr
142 65 70 75 80
145 His Asn Ala Glu Cys Glu Cys Ile Glu Gly Phe His Cys Leu Gly Pro
146 85 90 95
149 Gln Cys Thr Arg Cys Glu Lys Asp Cys Arg Pro Gly Gln Glu Leu Thr
150 100 105 110
153 Lys Gln Gly Cys Lys Thr Cys Ser Leu Gly Thr Phe Asn Asp Gln Asn
154 115 120 125
157 Gly Thr Gly Val Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Arg
158 130 135 140
161 Ser Val Leu Lys Thr Gly Thr Thr Glu Lys Asp Val Val Cys Gly Pro
162 145 150 155 160
165 Pro Val Val Ser Phe Ser Pro Ser Thr Thr Ile Ser Val Thr Pro Glu
166 165 170 175
169 Gly Gly Pro Gly Gly His Ser Leu Gln Val Leu Thr Leu Phe Leu Ala
170 180 185 190
173 Leu Thr Ser Ala Leu Leu Leu Ala Leu Ile Phe Ile Thr Leu Leu Phe

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174          195          200          205
177 Ser Val Leu Lys Trp Ile Arg Lys Lys Phe Pro His Ile Phe Lys Gln
178          210          215          220
181 Pro Phe Lys Lys Thr Thr Gly Ala Ala Gln Glu Glu Asp Ala Cys Ser
182 225          230          235          240
185 Cys Arg Cys Pro Gln Glu Glu Glu Gly Gly Gly Gly Tyr Glu Leu
186          245          250          255
189 <210> SEQ ID NO: 3
190 <211> LENGTH: 24
191 <212> TYPE: PRT
192 <213> ORGANISM: Mus musculus
194 <400> SEQUENCE: 3
196 Cys Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser
197 1          5          10          15
200 Thr His Asn Ala Glu Cys Glu Cys
201          20
204 <210> SEQ ID NO: 4
205 <211> LENGTH: 22
206 <212> TYPE: PRT
207 <213> ORGANISM: Drosophila
209 <400> SEQUENCE: 4
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212 1          5          10          15
215 Leu Val Cys Val Ser Cys
216          20
219 <210> SEQ ID NO: 5
220 <211> LENGTH: 26
221 <212> TYPE: PRT
222 <213> ORGANISM: Dictyostelium
224 <400> SEQUENCE: 5
226 Cys Pro Ile Cys Phe Glu Phe Ile Tyr Lys Lys Gln Ile Tyr Gln Cys
227 1          5          10          15
230 Lys Ser Gly His His Ala Cys Lys Glu Cys
231          20          25
234 <210> SEQ ID NO: 6
235 <211> LENGTH: 6
236 <212> TYPE: PRT
237 <213> ORGANISM: Mus musculus
239 <220> FEATURE:
240 <221> NAME/KEY: MISC_FEATURE
241 <222> LOCATION: (5)..(5)
242 <223> OTHER INFORMATION: X=any amino acid
245 <400> SEQUENCE: 6
W--> 247 Val Gln Asn Ser Xaa Asp
248 1          5
251 <210> SEQ ID NO: 7
252 <211> LENGTH: 12
253 <212> TYPE: PRT
C--> 254 <213> ORGANISM: Artificial

```

## RAW SEQUENCE LISTING

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Input Set : A:\iu-0008.ST25.txt

Output Set: N:\CRF3\07192002\J067122A.raw

```

W--> 256 <220> FEATURE:
W--> 256 <223> OTHER INFORMATION:
      256 <400> SEQUENCE: 7
      258 Cys Arg Pro Gly Gln Glu Leu Thr Lys Ser Gly Tyr
      259 1          5          10
      262 <210> SEQ ID NO: 8
      263 <211> LENGTH: 24
      264 <212> TYPE: PRT
C--> 265 <213> ORGANISM: artificial
      267 <220> FEATURE:
      268 <221> NAME/KEY: MISC_FEATURE
      269 <222> LOCATION: (2)..(3)
      270 <223> OTHER INFORMATION: X=any amino acid
      273 <220> FEATURE:
      274 <221> NAME/KEY: MISC_FEATURE
      275 <222> LOCATION: (5)..(13)
      276 <223> OTHER INFORMATION: X=any amino acid
      279 <220> FEATURE:
      280 <221> NAME/KEY: MISC_FEATURE
      281 <222> LOCATION: (15)..(17)
      282 <223> OTHER INFORMATION: X=any amino acid
      285 <220> FEATURE:
      286 <221> NAME/KEY: MISC_FEATURE
      287 <222> LOCATION: (19)..(21)
      288 <223> OTHER INFORMATION: X=any amino acid
      291 <220> FEATURE:
      292 <221> NAME/KEY: MISC_FEATURE
      293 <222> LOCATION: (23)..(23)
      294 <223> OTHER INFORMATION: X=any amino acid
      297 <400> SEQUENCE: 8
W--> 299 Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
      300 1          5          10          15
W--> 303 Xaa His Xaa Xaa Xaa Cys Xaa Cys
      304          20
      307 <210> SEQ ID NO: 9
      308 <211> LENGTH: 4
      309 <212> TYPE: PRT
C--> 310 <213> ORGANISM: Artificial
W--> 312 <220> FEATURE:
W--> 312 <223> OTHER INFORMATION:
      312 <400> SEQUENCE: 9
      314 Cys Arg Cys Pro
      315 1
      318 <210> SEQ ID NO: 10
      319 <211> LENGTH: 4
      320 <212> TYPE: PRT
C--> 321 <213> ORGANISM: Artificial
      323 <220> FEATURE:
      324 <221> NAME/KEY: MISC_FEATURE

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## RAW SEQUENCE LISTING

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Input Set : A:\iu-0008.ST25.txt

Output Set: N:\CRF3\07192002\J067122A.raw

```

325 <222> LOCATION: (2)..(2)
326 <223> OTHER INFORMATION: X=any amino acid
329 <400> SEQUENCE: 10
W--> 331 Cys Xaa Cys Pro
332 1
335 <210> SEQ ID NO: 11
336 <211> LENGTH: 25
337 <212> TYPE: DNA
C--> 338 <213> ORGANISM: Artificial
W--> 340 <220> FEATURE:
W--> 340 <223> OTHER INFORMATION:
340 <400> SEQUENCE: 11
341 acctcgaggt cctgtgcatg tgaca 25
344 <210> SEQ ID NO: 12
345 <211> LENGTH: 25
346 <212> TYPE: DNA
C--> 347 <213> ORGANISM: Artificial
W--> 349 <220> FEATURE:
W--> 349 <223> OTHER INFORMATION:
349 <400> SEQUENCE: 12
350 atgaattctt actgcaggag tgccc 25
353 <210> SEQ ID NO: 13
354 <211> LENGTH: 11
355 <212> TYPE: PRT
356 <213> ORGANISM: Mus musculus
358 <400> SEQUENCE: 13
360 Cys Arg Pro Gly Gln Glu Leu Thr Lys Gln Gly
361 1 5 10

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 07/19/2002  
PATENT APPLICATION: US/10/067,122A      TIME: 14:11:13

Input Set : A:\iu-0008.ST25.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1253,1254,1255  
Seq#:6; Xaa Pos. 5  
Seq#:8; Xaa Pos. 2,3,5,6,7,8,9,10,11,12,13,15,16,17,19,20,21,23  
Seq#:10; Xaa Pos. 2

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:7,8,9,10,11,12

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:7,9,11,12

## VERIFICATION SUMMARY

DATE: 07/19/2002

PATENT APPLICATION: US/10/067,122A

TIME: 14:11:13

Input Set : A:\iu-0008.ST25.txt

Output Set: N:\CRF3\07192002\J067122A.raw

L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1200  
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:254 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7  
L:256 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:256 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:265 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8  
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16  
L:310 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9  
L:312 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:312 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:321 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10  
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:338 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11  
L:340 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:340 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:347 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12  
L:349 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:349 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: